#### **SECTION 12 B - HAND HYGIENE**

- I. POLICY AND PROCEDURES. This Hospital Infection Prevention and Control hand hygiene policy reflects the basic principles contained within the CDC and HICPAC Guidelines for Recommendations for Hand Hygiene in Health Care Settings. This document has been adopted as AMEDD policy effective January 2004.
- **II. APPLICABILITY.** This policy is applicable to all departments, sections, and outlying clinics of DHCN including DeWitt Army Community Hospital, FHC of Fairfax, FHC of Woodbridge, Andrew Rader US Health Clinic, and Fort AP Hill.
- **III. GENERAL.** The hand hygiene guidelines are part of an overall CDC strategy to reduce infections in health care settings to promote patient safety. These recommendations are designed to improve hand hygiene practices of healthcare workers and to reduce transmission of pathogenic microorganisms to patients and personnel in healthcare settings. As in previous CDC/HICPAC guidelines, each recommendation is categorized on the basis of existing scientific data, theoretical rationale, applicability, and economic impact. The system for categorizing recommendations is as follows:

Category IA	Strongly recommended for implementation and strongly supported by well-designed experimental, clinical, or epidemiologic studies.
Category IB	Strongly recommended for implementation and supported by some experimental, clinical, or epidemiologic studies and a strong theoretical rationale.
Category IC	Required for implementation, as mandated by federal and/or state regulation or standard.
Category II	Suggested for implementation and supported by suggestive clinical or epidemiologic studies or a theoretical rationale.
No Recommendation	Unresolved issue. Practices for which insufficient evidence or no consensus regarding efficacy exist.

I. Indications for handwashing and hand antisepsis	
<b>A.</b> Wash hands with a non-antimicrobial soap and water or an antimicrobial soap and water when hands are visibly dirty or contaminated with proteinaceous material.	IA
<b>B.</b> If hands are not visibly soiled; use an alcohol-based waterless antiseptic agent for routinely decontaminating hands in all other clinical situations described in items I.C. through I.K. listed below.	IA
<b>C.</b> On nursing units where an alcohol-based waterless antiseptic agent is available, provide personnel with a non-antimicrobial soap for use when hands are visibly dirty or contaminated with proteinaceous material. It is not necessary, and may be confusing to personnel, to have both an alcohol-based waterless antiseptic agent and an antimicrobial soap available on the same nursing unit.	=

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I. Indications for handwashing and hand antisepsis, continued	Category	
<b>D.</b> Although waterless antiseptic agents are highly preferable, hand antisepsis using an antimicrobial soap may be considered in settings where time constraints are not an issue and easy access to hand hygiene facilities can be ensured, or in rare instances when a caregiver is intolerant of the waterless antiseptic product used in the institution.	IB	
<b>E.</b> Decontaminate hands after contact with a patient's intact skin (as in taking a pulse or blood pressure, or lifting a patient).	IB	
<b>F.</b> Decontaminate hands after contact with body fluids or excretions, mucous membranes, non-intact skin, or wound dressings, as long as hands are not visibly soiled.	IA	
<b>G.</b> Decontaminate hands if moving from a contaminated body site to a clean body site during patient care.		
H. Decontaminate hands after contact with inanimate objects (including medical equipment) in the immediate vicinity of the patient	Ш	
I. Decontaminate hands before caring for patients with severe neutropenia or other forms of severe immune suppression.		
<b>J</b> . Decontaminate hands before donning sterile gloves when inserting a central intravascular catheter.		
<b>K.</b> Decontaminate hands before inserting indwelling urinary catheters or other invasive devices that do not require a surgical procedure.		
L. Decontaminate hands after removing gloves.		
<b>M.</b> To improve hand hygiene adherence among personnel in units or instances where high workloads and high intensity of patient care are anticipated, make an alcohol-based waterless antiseptic agent available at the entrance to the patient's room or at the bedside, in other convenient locations, and in individual pocket-sized containers to be carried by healthcare workers.		
II. Hand hygiene technique		
<b>A.</b> When decontaminating hands with a waterless antiseptic agent such as an alcohol-based hand rub, apply product to palm of one hand and rub	IB	
hands together, covering all surfaces of hands and fingers, until hands are dry. Follow the manufacturer's recommendations on the volume of product to use. If an adequate volume of an alcohol-based hand rub is used, it should take 15 to 25 seconds for hands to dry.		
<b>B.</b> When washing hands with a non-antimicrobial or antimicrobial soap, wet hands first with warm water.		
<ul> <li>apply 3 to 5 ml of detergent to hands</li> <li>rub hands together vigorously for at least 15 seconds</li> </ul>		
<ul> <li>cover all surfaces of the hands and fingers</li> </ul>		
rinse hands with warm water      dry thoroughly with a disposable towel and use towel to turn faucet off.		
<ul> <li>dry thoroughly with a disposable towel and use towel to turn faucet off</li> </ul>		

III. Surgical hand antisepsis	Category
<b>A.</b> Remove rings, watches, and bracelets before beginning the surgical hand scrub.	II I
<b>B.</b> Remove debris from underneath fingernails using a nail cleaner under running water.	II
<b>C.</b> Surgical hand antisepsis using either an antimicrobial soap or an alcoholbased hand rub with persistent activity is recommended before donning sterile gloves when performing surgical procedures.	IB
<b>D.</b> When performing surgical hand antisepsis using an antimicrobial soap, scrub hands and forearms for the length of time recommended by the manufacturer, usually 2–6 minutes. Long scrub times (e.g., 10 minutes) are not necessary.	IB
<b>E.</b> When using an alcohol-based surgical hand scrub product with persistent activity, follow the manufacturer's instructions. Before applying the alcohol solution, prewash hands and forearms with a non-antimicrobial soap and dry hands and forearms completely. After application of the alcohol-based product as recommended, allow hands and forearms to dry thoroughly before donning sterile gloves.	IB
IV. Other Aspects of Hand Hygiene	
<b>A.</b> Do not wear artificial fingernails or extenders when providing patient care.	IA
B. Keep natural nails less than 1/4 inch long.	П
<b>C.</b> Wear gloves when it can be reasonably anticipated that contact with blood or other potentially infectious materials, mucous membranes, and non-intact skin will occur.	IC
<b>D.</b> Remove gloves after caring for a patient. Do not wear the same pair of gloves for the care of more than one patient, and do not wash gloves between patients.	IB
<b>E.</b> Change gloves during patient care if moving from a contaminated body site to a clean body site.	П
<b>F.</b> No recommendation on wearing rings in healthcare settings. Unresolved.	NR

V. Selection of hand hygiene agents	Category
<b>A.</b> Provide personnel with efficacious hand hygiene products that have low irritancy potential, particularly when used multiple times per shift. This recommendation applies to products used for hand antisepsis before and after patient care in clinical areas and to products used for surgical hand antisepsis by surgical personnel.	IB
<b>B.</b> To maximize acceptance of hand hygiene products by HCWs, solicit input from these employees regarding the feel, fragrance, and skin tolerance of any products under consideration. The cost of hand hygiene products should not be the primary factor influencing product selection.	IB
<b>C.</b> Prior to making purchasing decisions, evaluate the dispenser systems of various product manufacturers or distributors to ensure that dispensers function adequately and deliver an appropriate volume of product.	
<b>D.</b> Do not add soap to a partially empty soap dispenser. This practice of "topping off" dispensers may lead to bacterial contamination of soap.	IA
<b>E.</b> Before making purchasing decisions, evaluate the dispenser systems of various product manufacturers or distributors to ensure that dispensers function adequately and deliver an appropriate volume of product.	
VI. Skin care	Category
<b>A.</b> Provide healthcare workers with hand lotions or creams in order to minimize the occurrence of irritant contact dermatitis associated with hand antisepsis or handwashing.	IA
<b>B.</b> Solicit information from manufacturers regarding any effects that hand lotions, creams, or alcohol-based hand antiseptics may have on the persistent effects of antimicrobial soaps being used in the institution.	IB
VII. Healthcare worker educational and motivational programs	Category
<b>A.</b> As part of an overall program to improve hand hygiene practices of healthcare workers, educate personnel regarding the types of patient care activities that can result in hand contamination and the advantages and disadvantages of various methods used to clean their hands.	

**B.** Monitor healthcare workers' adherence with recommended hand hygiene practices and provide personnel with information regarding their performance.

**C.** Encourage patients and their families to remind healthcare workers to decontaminate their hands.

# IA II

### VIII. Administrative measures

- **A.** Make improved hand hygiene adherence an institutional priority and provide appropriate administrative support and financial resources.
- **B.** Implement a multidisciplinary program designed to improve adherence of health personnel to recommended hand hygiene practices.
- **C.** As part of a multidisciplinary program to improve hand hygiene adherence, provide healthcare workers with a readily accessible waterless antiseptic agent such as an alcohol-based handrub product.
- **D.** To improve hand hygiene adherence among personnel who work in areas in which high workloads and high intensity of patient care are anticipated, make an alcohol-based hand rub available at the entrance to the patient's room or at the bedside, in other convenient locations, and in individual pocket-sized containers to be carried by HCWs.
- **E**. Store supplies of alcohol-based hand rubs in cabinets or areas approved for flammable materials.

## Category

- IB
- IA

**IB** 

ΙA

IC

## IX. Outcome or process measurements

**A.** Develop and implement a system for measuring improvements in adherence of healthcare workers to recommended hand hygiene practices. Examples are:

- 1. Monitor and record adherence as the number of hand hygiene episodes performed by personnel/number of hand hygiene opportunities, by ward or by service. Provide feedback to personnel regarding their performance.
- 2. Monitor the volume of alcohol-based handrub (or detergent used for handwashing or hand antisepsis) used/1000 patient-days.
- **3.** Monitor adherence to policies dealing with wearing of artificial nails. When outbreaks of infection occur, assess the adequacy of healthcare worker hand hygiene.

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#### REFERENCES:

Boyce, J. <u>Guideline for Hand Hygiene in Health-Care Settings MMWR</u>, October 25, 2002 Vol. 51 / No. RR-16. View entire document at: <a href="http://www.cdc.gov/handhygiene/">http://www.cdc.gov/handhygiene/</a>